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## What is claimed is:

1	1. A topographic data processor comprising:
2	means for selecting a pair of frames from a plurality of candidate
3	picture frames of a target area captured from different high-altitude
4	positions, said pair of frames constituting a stereoscopic image of said target
5	area;
6	means for determining a parallax between the selected frames and
7	producing therefrom a first plurality of line-of-sight vectors and a second
8	plurality of line-of-sight vectors; and
9	means for converting said first and second pluralities of line-of-sight

2. A topographic data processor as claimed in claim 1, wherein said frame selecting means comprises:

frame combining means for combining said candidate frames into a plurality of pairs of frames which constitute a stereoscopic image of said target area; and

evaluating means for evaluating each of said pairs of frames with a fitness value indicative of fitness of said each pair of frames to topographic measurement of said target area.

3. A topographic data processor as claimed in claim 2, wherein said evaluating means comprises:

a geometric condition analyzer for analyzing said pairs of frames in terms of their geometric condition and evaluating said pairs of frames with a fitness value proportional to their image resolution; and

decision making means for making a decision on the fitness values obtained from all pairs of frames and selecting one of said pairs of frames having the highest fitness value.

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1	4. A topographic data processor as claimed in claim 3, wherein
2	said parallax determining means determines a parallax between the frames of
3	each said pair of frames, and
4	wherein said evaluating means further comprises frame matching
5	analyzing means for analyzing said pairs of frames in terms of degree of
6	match between the paired frames and evaluating said pairs of frames with a
7	fitness value proportional to an average value of point-to-point correlations
8	between said paired frames,
9	wherein said decision making means produces a total value of the
10	fitness values of each of said pairs of frames and selecting one of said pairs of
11	frames having the highest total value.
1	5. A topographic data processor as claimed in claim 2, wherein
2	said parallax determining means comprises:
3	frame aligning means for aligning the frames of said selected pair in
4	orientation; and
5	correlation calculating means for calculating point-to-point
6	correlations between the aligned frames.
1	6. A topographic data processor as claimed in claim 4, wherein
2	said parallax determining means comprises:
3	frame aligning means for aligning the frames of said selected pair so
4	that the frames are equally oriented; and
5	correlation calculating means for calculating point-to-point correlation
6	values between the aligned frames and supplying the calculated correlation
7	values to said frame matching analyzing means, and
8	wherein the frame matching analyzing means calculates said average
9	value of point-to-point correlations from the correlation values supplied from
10	the correlation calculating means.

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- 7. A topographic data processor as claimed in claim 4, wherein said parallax determining means further comprises an interpolator for interpolating one of the paired frames before said frames are aligned in orientation so that said frames of said pair have equal value of resolution.
- 8. A topographic data processor as claimed in claim 2, wherein said evaluating means further comprises filtering condition analyzing means for analyzing each of said pairs of frames in terms of filtering condition and evaluating each said pair of frames with a fitness value representative of filtering characteristics of image sensors.
- 9. A topographic data processor as claimed in claim 2, wherein said evaluating means further comprises sunlight condition analyzing means for analyzing each of said pairs of combined frames in terms of sunlight condition and evaluating each said pair of frames with a fitness value representative of degree of similarity in shadow and shading effects between the frames of each said pair.
- 1 10. A topographic data processor as claimed in claim 2, wherein 2 said evaluating means further comprises time difference analyzing means for 3 analyzing each of said pairs of combined frames in terms of time difference 4 and evaluating each said pair of frames with a fitness value inversely 5 proportional to a time difference between the instant one of the frames of said 6 each pair is captured and the instant the other frame is captured.
- 1 11. A topographic data processor as claimed in claim 1, further
  2 comprising storage medium for storing a plurality of picture frames captured
  3 by airborne image sensors, wherein said selecting means selects said pair of
  4 frames from said storage medium.

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- A topographic data processor as claimed in claim 10, wherein 12. 1 said frame combining means includes area selecting means for selecting 2 picture frames covering said target area from all picture frames stored in said 3 storage medium. A topographic data processor as claimed in claim 1, further 13. 1 comprising an image sensing scheduler comprising: 2 image sensor selecting means for selecting at least one airborne image 3 sensor if an appropriate frame is not available to constitute said stereoscopic 4 image and sensing picture frames from the selected image sensor; 5 frame combining means for combining the sensed picture frames to 6 form a plurality of pairs of received frames which may constitute a 7 stereoscopic image of said target area; 8 evaluating means for evaluating each pair of sensed frames with a 9 fitness value indicative of fitness of said each pair of frames to topographic 10 measurement of said target area; and 11 12 means for producing a schedule for selecting one or more airborne sensors based on the fitness values obtained from all pairs of sensed frames. 13
- 1 14. A topographic data processor as claimed in claim 13, wherein said evaluating means comprises a geometric condition analyzer for analyzing said pairs of sensed frames in terms of their geometric condition and evaluating said pairs of frames with a fitness value inversely proportional to quantum errors between the frames of each said pair.
  - 15. A topographic data processor as claimed in claim 14, wherein said evaluating means comprises filtering condition analyzing means for analyzing each of said pairs of sensed frames in terms of filtering condition and evaluating each said pair of sensed frames with a fitness value representative of filtering characteristics of image sensors.

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1	16. A topographic data processor as claimed in claim 14, wherein
2	said evaluating means further comprises sunlight condition analyzing means
3	for analyzing each of said pairs of sensed frames in terms of sunlight
4	condition and evaluating each said pair of sensed frames with a fitness value
5	representative of degree of similarity in shadow and shading effects between
6	the frames of each said pair.
1	17 A taga graphia data programar as alaimad in alaim 14 subansin
7	17. A topographic data processor as claimed in claim 14, wherein
2	said evaluating means further comprises time difference analyzing means for analyzing each of said pairs of sensed frames in terms of time difference and
3 4	evaluating each said pair of sensed frames with a fitness value inversely
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6	proportional to a time difference between the instant one of the frames of said each pair is captured and the instant the other frame is captured.
О	each pair is captured and the histant the other frame is captured.
1	18. A topographic data processor comprising:
2	frame selecting means for selecting a pair of frames from a plurality of
3	candidate picture frames of a target area captured from high-altitude
4	positions, said selected pair of frames constituting a stereoscopic image of
5	said target area;
6	scheduling means for selecting at least one airborne image sensor if an
7	appropriate frame is not available in said plurality of candidate frames,
8	sensing picture frames from the selected image sensor, whereby said frame
9	selecting means uses the sensed frames to select a pair of frames;
10	means for determining a parallax between the frames selected by the
11	frame selecting means and producing therefrom a first plurality of line-of-
12	sight vectors and a second plurality of line-of-sight vectors; and
13	means for converting said first and second pluralities of line-of-sight

19. A topographic data processor as claimed in claim 18, wherein

vectors to topographic data.

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2 said frame selecting means comprises:

means for combining the received picture frames to form a plurality of pairs of sensed frames which may constitute a stereoscopic image of said target area;

evaluating means for evaluating each pair of sensed frames with a fitness value indicative of fitness of said each pair of frames to topographic measurement of said target area; and

scheduling means for producing a schedule for sensing picture frames from one or more airborne image sensor based on fitness values obtained from all said pairs of sensed frames.

- 20. A topographic data processor as claimed in claim 19, wherein said evaluating means comprises a geometric condition analyzer for analyzing said pairs of sensed frames in terms of their geometric condition and evaluating said pairs of frames with a fitness value inversely proportional to quantum errors between the frames of each said pair.
- 21. A topographic data processor as claimed in claim 20, wherein said evaluating means further comprises filtering condition analyzing means for analyzing each of said pairs of sensed frames in terms of filtering condition and evaluating each said pair of sensed frames with a fitness value representative of filtering characteristics of image sensors.
- 22. A topographic data processor as claimed in claim 20, wherein said evaluating means further comprises sunlight condition analyzing means for analyzing each of said pairs of sensed frames in terms of sunlight condition and evaluating each said pair of sensed frames with a fitness value representative of degree of similarity in shadow and shading effects between the frames of each said pair.

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1	23. A topographic data processor as claimed in claim 20, wherein
2	said evaluating means further comprises time difference analyzing means for
3	analyzing each of said pairs of sensed frames in terms of time difference and
4	evaluating each said pair of sensed frames with a fitness value inversely
5	proportional to a time difference between the instant one of the frames of said
6	each pair is captured and the instant the other frame is captured.
	•
1	24. A topographic measurement system comprising:
2	at least one image sensor mounted on a vehicle flying over a target
3	area;
4	means for sensing a plurality of picture frames at different positions by
5	using said image sensor;
6	means for selecting a pair of frames from said plurality of frames, said
7	pair of frames constituting a stereoscopic image of said target area;
8	means for determining a parallax between the selected frames and
9	producing therefrom a first plurality of line-of-sight vectors and a second
10	plurality of line-of-sight vectors; and
11	means for converting said first and second pluralities of line-of-sight
12	vectors to topographic data.
1	25. A topographic measurement system as claimed in claim 24,
2	wherein said frame selecting means comprises:
3	frame combining means for combining said candidate frames into a
4	plurality of pairs of frames which constitute a stereoscopic image of said
5	target area;
6	evaluating means for evaluating each of said pairs of frames with a
7	fitness value indicative of fitness of said each pair of frames to topographic
8	measurement of said target area; and
9	decision means for selecting one of said pairs of frames based on
10	fitness values obtained from all said pairs of sensed frames.

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1	26. A topographic measurement system as claimed in claim 25,
2	wherein said evaluating means comprises:
3	a geometric condition analyzer for analyzing said pairs of frames in
4	terms of their geometric condition and evaluating said pairs of frames with a
5	fitness value proportional to their image resolution; and
6	decision making means for making a decision on the fitness values
7	obtained by all pairs of frames and selecting one of said pairs of frames
8	having the highest fitness value.
1	27. A topographic measurement system as claimed in claim 26,
2	wherein said parallax determining means determines a parallax between the
3	frames of each said pair of frames, and
4	wherein said evaluating means further comprises frame matching
5	analyzing means for analyzing said pairs of frames in terms of degree of
6	match between the paired frames and evaluating said pairs of frames with a
7	fitness value proportional to an average value of point-to-point correlations
8	between said paired frames,
9	wherein said decision making means produces a total value of the
10	fitness values of each of said pairs of frames and selecting one of said pairs of
11	frames having the highest total value.
1	28. A topographic measurement system as claimed in claim 25,
2	wherein said parallax determining means comprises:
3	frame aligning means for aligning the frames of said selected pair in
4	orientation; and
5	correlation calculating means for calculating point-to-point
6	correlations between the aligned frames.
1	29. A topographic measurement system as claimed in claim 27.

wherein said parallax determining means comprises:

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3	frame aligning means for aligning the frames of said selected pair in
Į.	orientation; and
5	correlation calculating means for calculating point-to-point correlation
Ś	values between the aligned frames and supplying the calculated correlation
7	values to said frame matching analyzing means, and
3	wherein the frame matching analyzing means calculates said average

- wherein the frame matching analyzing means calculates said average value of point-to-point correlations from the correlation values supplied from the correlation calculating means.
- 30. A topographic measurement system as claimed in claim 27, wherein said parallax determining means further comprises an interpolator for interpolating one of the paired frames before said frames are aligned in orientation so that said frames of said pair have equal value of resolution.
- 31. A topographic measurement system as claimed in claim 25, wherein said evaluating means further comprises filtering condition analyzing means for analyzing each of said pairs of frames in terms of filtering condition and evaluating each said pair of frames with a fitness value representative of filtering characteristics of image sensors.
- 32. A topographic measurement system as claimed in claim 25, wherein said evaluating means further comprises sunlight condition analyzing means for analyzing each of said pairs of combined frames in terms of sunlight condition and evaluating each said pair of frames with a fitness value representative of degree of similarity in shadow and shading effects between the frames of each said pair.
- 1 33. A topographic measurement system as claimed in claim 25, wherein said evaluating means further comprises time difference analyzing means for analyzing each of said pairs of combined frames in terms of time

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- 4 difference and evaluating each said pair of frames with a fitness value
- 5 inversely proportional to a time difference between the instant one of the
- 6 frames of said each pair is captured and the instant the other frame is
- 7 captured.
- 1 34. A topographic measurement system as claimed in claim 24,
- 2 further comprising storage medium for storing a plurality of picture frames
- 3 captured by airborne image sensors, wherein said selecting means selects said
- 4 pair of frames from said storage medium.
- 1 35. A topographic measurement system as claimed in claim 34,
- 2 wherein said frame combining means includes area selecting means for
- 3 selecting frames covering said target area from all frames stored in said
- 4 storage medium.
- 1 36. A topographic measurement system as claimed in claim 24,
- 2 further comprising an image sensing scheduler comprising:
- 3 sensor selecting means for selecting at least one airborne image sensor
- 4 if an appropriate frame is not available to constitute said stereoscopic image
- 5 and sensing picture frames from the selected image sensor;
- frame combining means for combining the received picture frames to
- 7 form a plurality of pairs of sensed frames which may constitute a stereoscopic
- 8 image of said target area;
- evaluating means for evaluating each pair of sensed frames with a
- 10 fitness value indicative of fitness of said each pair of frames to topographic
- 11 measurement of said target area; and
- scheduling means for producing a schedule for selecting one or more
- 13 airborne sensors based on the fitness values obtained from all pairs of sensed
- 14 frames.

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- 37. A topographic measurement system as claimed in claim 36,
  wherein said evaluating means of said scheduler comprises a geometric
  condition analyzer for analyzing said pairs of sensed frames in terms of their
  geometric condition and evaluating said pairs of frames with a fitness value
  inversely proportional to quantum errors between the frames of each said
  pair.
- 38. A topographic measurement system as claimed in claim 37, wherein said evaluating means of the scheduler further comprises filtering condition analyzing means for analyzing each of said pairs of sensed frames in terms of filtering condition and evaluating each said pair of sensed frames with a fitness value representative of filtering characteristics of image sensors.
  - 39. A topographic measurement system as claimed in claim 37, wherein said evaluating means of the scheduler further comprises sunlight condition analyzing means for analyzing each of said pairs of sensed frames in terms of sunlight condition and evaluating each said pair of sensed frames with a fitness value representative of degree of similarity in shadow and shading effects between the frames of each said pair.
  - 40. A topographic measurement system as claimed in claim 37, wherein said evaluating means of the scheduler further comprises time difference analyzing means for analyzing each of said pairs of sensed frames in terms of time difference and evaluating each said pair of sensed frames with a fitness value inversely proportional to a time difference between the instant one of the frames of said each pair is captured and the instant the other frame is captured.
    - 41. A topographic measurement system comprising:

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2	at least one image sensor mounted on a vehicle flying over a target
3	area;
4	means for sensing a plurality of picture frames at different positions by
5	using said image sensor;
6	frame selecting means for selecting a pair of frames from said plurality
7	of frames of said target area, said selected pair of frames constituting a
8	stereoscopic image of said target area;
9	scheduling means for selecting at least one image sensor if an
10	appropriate frame is not available in said plurality of frames, sensing picture
11	frames from the selected image sensor, whereby said frame selecting means
12	uses the sensed frames to select a pair of frames;
13	means for determining a parallax between the frames selected by the
14	frame selecting means and producing therefrom a first plurality of line-of-
15	sight vectors and a second plurality of line-of-sight vectors; and
16	means for converting said first and second pluralities of line-of-sight
17	vectors to topographic data.
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1	42. A topographic measurement system as claimed in claim 41,
2	wherein said scheduling means comprises:
3	frame combining means for combining the received picture frames to
4	form a plurality of pairs of sensed frames which may constitute a stereoscopi
5	image of said target area;
6	evaluating means for evaluating each pair of sensed frames with a
7	fitness value indicative of fitness of said each pair of frames to topographic
8	measurement of said target area; and
9	decision means for producing a schedule for sensing picture frames
10	from one or more airborne image sensors based on fitness values obtained
11	from all of said pairs of sensed frames.

A topographic measurement system as claimed in claim 42,

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- wherein said evaluating means comprises a geometric condition analyzer for
- analyzing said pairs of sensed frames in terms of their geometric condition 3
- and evaluating said pairs of frames with a fitness value inversely
- proportional to quantum errors between the frames of each said pair. 5
- A topographic measurement system as claimed in claim 43, 1
- wherein said evaluating means further comprises filtering condition
- analyzing means for analyzing each of said pairs of sensed frames in terms of 3
- filtering condition and evaluating each said pair of sensed frames with a
- fitness value representative of filtering characteristics of image sensors.
- **4**5. A topographic measurement system as claimed in claim 43, 1
- wherein said evaluating means further comprises sunlight condition 2
- analyzing means for analyzing each of said pairs of sensed frames in terms of 3
- sunlight condition and evaluating each said pair of sensed frames with a 4
- fitness value representative of degree of similarity in shadow and shading 5
- effects between the frames of each said pair.
- A topographic measurement system as claimed in claim 43, 46. 1
- wherein said evaluating means further comprises time difference analyzing
- means for analyzing each of said pairs of sensed frames in terms of time 3
- difference and evaluating each said pair of sensed frames with a fitness value 4
- inversely proportional to a time difference between the instant one of the 5
- frames of said each pair is captured and the instant the other frame is 6
- captured.

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- 47. A computer readable storage medium containing a program 1 executable by a computer to perform the steps of: 2
- selecting a pair of frames from a plurality of candidate picture a) 3
- frames of a target area captured from different high-altitude positions, said

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of frames, and

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- pair of frames constituting a stereoscopic image of said target area; 5 b) determining a parallax between the selected frames and 6 producing therefrom a first plurality of line-of-sight vectors and a second plurality of line-of-sight vectors; and converting said first and second pluralities of line-of-sight vectors to topographic data. 10 A computer readable storage medium as claimed in claim 45, 1 48. wherein step (a) comprises: 2 combining said candidate frames into a plurality of pairs of 3 frames which constitute a stereoscopic image of said target area; evaluating each of said pairs of frames with a fitness value 5 indicative of fitness of said each pair of frames to topographic measurement of said target area; and selecting one of said pairs of frames based on fitness values 8 obtained from all said pairs of frames. A computer readable storage medium as claimed in claim 48, 1 wherein step (a<sub>2</sub>) comprises: a<sub>2-1</sub>) analyzing said pairs of frames in terms of their geometric condition and evaluating said pairs of frames with a fitness value 4 proportional to their image resolution; and 5 a<sub>2-2</sub>) making a decision on the fitness values obtained by all pairs of 6 frames and selecting one of said pairs of frames having the highest fitness value. 8 50. A computer readable storage medium as claimed in claim 48, 1
- wherein step  $(a_2)$  further comprises the step  $(a_{2-3})$  of analyzing said 4

wherein step (b) determines a parallax between the frames of each said pair

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- pairs of frames in terms of degree of match between the paired frames and
  evaluating said pairs of frames with a fitness value proportional to an
  average value of point-to-point correlations between said paired frames,
  wherein step (a<sub>2-2</sub>) produces a total value of the fitness values of each
  of said pairs of frames and selecting one of said pairs of frames having the
  highest total value.
- 51. A computer readable storage medium as claimed in claim 47, wherein step (b) comprises:
- b<sub>1</sub>) aligning the frames of said selected pair in orientation; and
- b<sub>2</sub>) calculating point-to-point correlations between the aligned frames.
- 52. A computer readable storage medium as claimed in claim 50, wherein step (b) comprises:
- b<sub>1</sub>) aligning the frames of said selected pair so that the frames are equally oriented; and
- 5 b<sub>2</sub>) calculating point-to-point correlation values between the 6 aligned frames, and
- wherein step (a<sub>2-3</sub>) calculates said average value of point-to-point correlations from the correlation values calculated by step (b<sub>2</sub>).
- 53. A computer readable storage medium as claimed in claim 51, wherein step (b) further comprises interpolating one of the paired frames before step (b<sub>1</sub>) is performed so that said frames of said pair have equal value of resolution.
- 54. A computer readable storage medium as claimed in claim 49, wherein step (a<sub>2</sub>) further comprises analyzing each of said pairs of frames in terms of filtering condition and evaluating each said pair of frames with a

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- 4 fitness value representative of filtering characteristics of image sensors.
- 1 55. A computer readable storage medium as claimed in claim 49,
- 2 wherein step (a<sub>2</sub>) further comprises analyzing each of said pairs of combined
- 3 frames in terms of sunlight condition and evaluating each said pair of frames
- 4 with a fitness value representative of degree of similarity in shadow and
- 5 shading effects between the frames of each said pair.
- 1 56. A computer readable storage medium as claimed in claim 49,
- 2 wherein step (a<sub>2</sub>) further comprises analyzing each of said pairs of combined
- 3 frames in terms of time difference and evaluating each said pair of frames
- 4 with a fitness value inversely proportional to a time difference between the
- 5 instant one of the frames of said each pair is captured and the instant the
- 6 other frame is captured.
- 57. A computer readable storage medium as claimed in claim 47, further comprising the steps of:
- c) selecting at least one airborne image sensor if an appropriate frame is not available to constitute said stereoscopic image and sensing
- 5 picture frames from the selected image sensor;
- d) combining the received picture frames to form a plurality of
- 7 pairs of sensed frames which may constitute a stereoscopic image of said
- 8 target area;
- e) evaluating each pair of sensed frames with a fitness value
- indicative of fitness of said each pair of frames to topographic measurement
- 11 of said target area; and
- 12 f) producing a schedule for selecting one or more airborne sensors
- 13 based on the fitness values obtained from all pairs of sensed frames.
- 1 58. A computer readable storage medium as claimed in claim 57,

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- 2 wherein step (e) comprises analyzing said pairs of sensed frames in terms of
- 3 their geometric condition and evaluating said pairs of frames with a fitness
- 4 value inversely proportional to quantum errors between the frames of each
- 5 said pair.
- 1 59. A computer readable storage medium as claimed in claim 57,
- wherein step (e) further comprises analyzing each of said pairs of sensed
- 3 frames in terms of filtering condition and evaluating each said pair of sensed
- 4 frames with a fitness value representative of filtering characteristics of image
- 5 sensors.
- 1 60. A computer readable storage medium as claimed in claim 57,
- wherein step (e) further comprises analyzing each of said pairs of sensed
- 3 frames in terms of sunlight condition and evaluating each said pair of sensed
- 4 frames with a fitness value representative of degree of similarity in shadow
- 5 and shading effects between the frames of each said pair.
- 1 61. A computer readable storage medium as claimed in claim 57,
- 2 wherein step (e) further comprises analyzing each of said pairs of sensed
- 3 frames in terms of time difference and evaluating each said pair of sensed
- 4 frames with a fitness value inversely proportional to a time difference
- 5 between the instant one of the frames of said each pair is captured and the
- 6 instant the other frame is captured.

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- 1 62. A computer readable storage medium containing a program 2 executable by a computer to perform the steps of:
- a) selecting a pair of frames from a plurality of candidate frames of
- a target area captured from high-altitude positions, said selected pair of
- frames constituting a stereoscopic image of said target area;
- 6 b) selecting at least one airborne image sensor if an appropriate

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- 7 frame is not available in said plurality of candidate frames, sensing picture
- 8 frames from the selected image sensor and repeating step (a) whereby a new
- 9 pair of frames is selected;
- 10 c) determining a parallax between the selected frames and
- producing therefrom a first plurality of line-of-sight vectors and a second
- 12 plurality of line-of-sight vectors; and
- d) converting said first and second pluralities of line-of-sight
- 14 vectors to topographic data.
- 1 63. A computer readable storage medium as claimed in claim 62,
- 2 wherein step (a) comprises:
- a<sub>1</sub>) combining the received picture frames to form a plurality of
- 4 pairs of sensed frames which may constitute a stereoscopic image of said
- 5 target area; and
- 6 a<sub>2</sub>) evaluating each pair of sensed frames with a fitness value
- indicative of fitness of said each pair of frames to topographic measurement
- 8 of said target area.
- 1 64. A computer readable storage medium as claimed in claim 63,
- 2 wherein step (a<sub>2</sub>) comprises analyzing said pairs of sensed frames in terms of
- 3 their geometric condition and evaluating said pairs of frames with a fitness
- 4 value inversely proportional to quantum errors between the frames of each
- 5 said pair.
- 1 65. A computer readable storage medium as claimed in claim 64,
- 2 wherein step (a<sub>2</sub>) further comprises analyzing each of said pairs of sensed
- 3 frames in terms of filtering condition and evaluating each said pair of sensed
- 4 frames with a fitness value representative of filtering characteristics of image
- 5 sensors.

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- 1 66. A computer readable storage medium as claimed in claim 64, 2 wherein step (a<sub>2</sub>) further comprises analyzing each of said pairs of sensed 3 frames in terms of sunlight condition and evaluating each said pair of sensed 4 frames with a fitness value representative of degree of similarity in shadow 5 and shading effects between the frames of each said pair.
- 1 67. A computer readable storage medium as claimed in claim 64, 2 wherein step (a<sub>2</sub>) further comprises analyzing each of said pairs of sensed 3 frames in terms of time difference and evaluating each said pair of sensed 4 frames with a fitness value inversely proportional to a time difference 5 between the instant one of the frames of said each pair is captured and the 6 instant the other frame is captured.
- 1 68. A computer readable storage medium as claimed in claim 64, 2 wherein step (a<sub>2</sub>) further comprises analyzing each of said pairs of frames in 3 terms of degree of match between the frames of each pair and evaluating each 4 said pair of frames with a fitness value proportional to an average value of 5 point-to-point correlations between said paired frames.